

REMARKS

Claims 1 and 41-63 were pending in the application. Claims 1 and 59-62 have been cancelled. Therefore, claims 41-58 and 60-63 are currently pending. The Applicant is seeking to have an interference declared between the present application and U.S. Patent No. 5,729,603 ("the '603 patent").

Applying the Limitations of Each Claim to the Disclosure (37 C.F.R. § 1.607(a)(5)):

The Examiner stated that the Applicant has failed to specifically apply each limitation or element of each of the copied claim(s) to the disclosure of the specification, as set forth in 37 C.F.R. § 1.607(a)(5).

In the original papers, the Applicant applied claim 41 to the disclosure of the specification. Below, in chart form, the Applicant has further illuminated those comments regarding claim 41 and has also applied claims 42-58 and 63 to the disclosure of the specification:

Claim 41 Language:

41. A self-configuring telephone interface unit, comprising:

Applying Claim 41 to the Disclosure:

A self-configuring telephone interface unit 50 is disclosed in the written description on page 6, line 16, to page 14, line 3 and is illustrated in Figs. 6-9.

Claim 41 (cont.):

a switch matrix, settable to any of a plurality of switch configurations, each switch configuration coupling a plurality of signal lines from a handset port of a telephone to a plurality of signal lines from a headset, the plurality of signal lines from the handset port including a handset port receive path, the plurality of signal lines from the handset including a headset receive path; and

The system interface unit 50 allows a telephone accessory 60 or 62 to interface with a telephone base unit 54 or 58. Page 6, line 25 to page 7, line 2. A switch array 2 is shown in Figs. 8-9 of the disclosure. The switch array 2 has four input ports which are coupled to a four line telephone base jack 202. Page 13, lines 13-15. The base jack 202 includes LINES 1-4 in Figs. 7 and 8 from a handset port of a telephone to a plurality of signal lines (labelled RX OUT and TX INPUT in Fig. 8). The switch array 2 is manipulated by sequentially coupling pairs of line input ports until a CO dialtone is sensed by the digital MCU 100 in the receive channel. Page 13, lines 19-27. Once the receive lines are determined, the transmit lines are determined; based upon the selected receive lines, certain transmit line configurations are highly probably and are prioritized by algorithms. Page 15, lines 24-27.

Claim 41 (cont.):

a control logic, coupled to the switch matrix, that automatically determines which of the plurality of signal lines from the handset port comprise the handset port receive path, determines a preferred switch configuration from among a plurality of switch configurations based upon which of the plurality of signal lines from the handset port comprise the handset port receive path, and sets the switch matrix to the preferred switch configuration, the preferred switch configuration coupling the handset port receive path to the headset receive path.

Under control of the digital MCU 100 (Fig. 7), the addressable latch 1 (Fig. 8) manipulates the switch array 2 by sequentially coupling pairs of line input ports until a CO dialtone is sensed by the digital MCU 100 in the receive channel.
Page 13, lines 19-27.

Claim 42 Language:

42. The interface unit of claim 41 wherein:

the switch matrix comprises a plurality of switches, each of the plurality of switches coupling one handset port signal line with one headset signal line;

each switch configuration in the plurality of switch configurations comprises a predetermined setting for each of the plurality of switches; and,

the control logic sets the switch matrix to a switch configuration by setting the plurality of switches to the predetermined setting for the switch configuration.

Applying Claim 42 to the Disclosure:

Fig. 9 of the disclosure shows the switch matrix 2, including a plurality of switches 0-16. By comparing Fig. 9 to Fig. 8, it can be seen that the switches couple one of the handset port lines PIN 1, PIN 2, PIN 3 and PIN 4 in Fig. 9 (which correspond to LINES 1-4 in Fig. 8) to one of a plurality of telephone accessory signal lines RX1, RX2, TX1 and TX2 in Fig. 9 (which correspond to RX1 OUT, RX2 OUT, TX1 IN and TX2 RTN in Fig. 8). From Figs. 8 and 9, it is apparent that the

The switch array 2 connects LINES 1-4 of the 4-wire phone port 202 to the two transmit and two receive channels in any order and polarity. Page 18, lines 21-23. See also, page 3, lines 24-26; page 13, lines 23-26.

Under control of the digital MCU 100, the switch array 2 is set to select the appropriate transmit and receive lines via the bit addressable latch 1. Page 18, lines 23-25.

Claim 43 Language:

43. The interface unit of claim 42 wherein:

each of the plurality of switches comprises a FET switch; and

the control logic comprises an FET gate driver that sets the FET switches.

Claim 44 Language:

44. The interface unit of claim 41 wherein:

the switch matrix comprises a plurality of relays, the plurality of relays coupling the plurality of handset port signal lines to the plurality of headset signal lines;

each switch configuration in the plurality of switch configurations comprises a predetermined setting for each of the plurality of relays; and,

the control logic sets the switch matrix to a switch configuration by setting the plurality of relays to the predetermined setting for the switch configuration.

Applying Claim 43 to the Disclosure:

The switches 0-16 illustrated in Fig. 9 are referred to as "analog switches."

Page 18, line 22. It is inherently known that analog switches 0-16 can be implemented as field effect transistors. In which case, the latch 1 adjusts the gate voltages to set the switches 0-16. See Fig. 8.

Applying Claim 44 to the Disclosure:

The switches 0-16 illustrated in Fig. 9 are referred to as "analog switches."

Page 18, line 22. It is inherently known that analog switches 0-16 can be implemented as relays. In which case, the latch 1 sets their configuration. See Fig. 8.

Claim 45 Language:

45. The interface unit of claim 41 wherein:

the switch matrix is based on a cascading architecture.

Claim 46 Language:

46. The interface unit of claim 41 further comprising:

a signal level detector that generates an output signal, the output signal indicating a level of an input signal to the signal level detector;

a detector switch matrix, settable to any of a plurality of detector switch configurations, each detector switch configuration coupling the signal level detector input to signal lines from among the plurality of signal lines from the handset port;

Applying Claim 45 to the Disclosure:

The switch matrix and shunt array illustrated in Fig. 9 appears to be based on a cascaded architecture. See Fig. 9.

Applying Claim 46 to the Disclosure:

The digital MCU 100 functions as a dialtone signal detector. Page 13, lines 22-26.

The switch array 2 couples the dialtone signal from the handset port 202 to the digital MCU 100 which is functioning as a signal detector. Page 13, lines 22-26.

Claim 46 (cont.):

the control logic further for setting the detector switch matrix to a first detector switch configuration from among the plurality of detector switch configurations; for receiving a first output signal from the signal level detector, the first output signal generated in response to a test signal received by the handset port receive path; and for determining, based on the first output signal from the signal level detector, whether the signal lines coupled by the first detector switch configuration comprise the handset port receive path.

The addressable latch 1 manipulates the switch array 2 under control of the digital MCU 100 for determining which pairs of the line input ports are in the receive channel based upon sensing the dialtone signal. Page 13, lines 22-26.

Claim 47 Language:

47. The interface unit of claim 46 wherein:
the test signal comprises a dial tone.

Applying Claim 47 to the Disclosure:

As explained above in reference to claim 46, the digital MCU 100 senses a dialtone signal. Page 13, lines 22-26.

Claim 48 Language:

48. The interface unit of claim 46 wherein the signal level detector comprises:
an AC voltage detector which receives the input signal to the signal level detector; and,

Applying Claim 48 to the Disclosure:

Because the dialtone signal is an AC signal, the MCU 100 inherently detects an AC signal when it detects the dialtone signal. See page 13, lines 22-26.

Claim 48 (cont.):

an A/D converter coupled to the AC voltage detector, the A/D converter generating the output signal of the signal level detector.

A sample and hold circuit RX-8 (Fig. 8) samples the AC dialtone signal and couples the signal sample to a A/D input port of the MCU 100 (a receive level reference port). Page 15, lines 13-23.

Claim 49 Language:

49. The interface unit of claim 46 further comprising:

a variable gain circuit for modifying an amplitude of a signal transmitted on a headset transmit path;

the plurality of signal lines from the handset port further including a handset port transmit path; and

Applying Claim 49 to the Disclosure:

The transmit output attenuator TX-5 (Fig. 8) functions as a variable gain circuit in the transmit path. Page 12, lines 14-16.

A transmit signal received from the telephone accessory 60 or 62 (Fig. 6) is coupled to a transmit path which includes a transmit preamplifier TX-2 (Fig. 8), a transmit VCA TX-3 (Fig. 8), a transmit expander circuit TX-4 (Fig. 8), a transmit output step attenuator TX-5 (Fig. 8) and a transmit output amplifier TX-6 (Fig. 8). Page 16, line 4 to page 18, line 4.

Claim 49 (cont.):

a control logic further for alternately coupling the headset transmit path and a handset transmit path to the handset port transmit path; for setting the detector switch matrix to a detector switch configuration which couples the handset port transmit path to the signal level detector input; for receiving second and third output signals from the signal level detector, the second output signal generated in response to an audio test signal transmitted by the handset transmit path, the third output signal generated in response to the audio test signal transmitted by the headset transmit path; and for adjusting a gain of the variable gain circuit in response to the second and third output signals until a gain of the headset transmit path is substantially equal to a gain of the handset transmit path.

The digital MCU 100 manipulates the crosspoint switch array 2 by sequentially coupling pairs of the transmit output ports starting with the most probable pairs defined in system algorithms. Page 17, lines 5-7. See also page 4, lines 24-27, where a handset/headset switch is disclosed. The system's switching algorithms are shown in detail in Figures 4 and 5. A 1 KHz transmit calibration signal is applied to the telephone base unit via the jack lines 202 until the 1 KHz signal is sensed by the digital MCU 100 at the receive level reference output RX LEVEL REF. Page 17, lines 8-11. When the digital MCU 100 senses the 1 KHz signal it will have successfully located the appropriate transmit lines and will latch the information and adjust the transmit output step attenuator TX-5. Page 17, lines 11-13.

Claim 50 Language:

50. The interface unit of claim 41 wherein:

the interface unit further comprises a variable gain circuit for modifying an amplitude of a signal transmitted on a headset transmit path; and, the control logic further automatically adjusts a gain of the variable gain circuit until a gain of the headset transmit path is substantially equal to a gain of a handset transmit path.

Applying Claim 50 to the Disclosure:

A gain variance in transmit line sensitivity exists between telephone base units that are commercially available. Page 17, lines 14-15. A precise sensitivity interface match is critical for optimal performance of the transmitted signal with the various telephone base units. Page 17, lines 15-17. To solve this problem, the signal output of the transmit VCA TX-3 (Fig. 8) is coupled into the transmit output step attenuator TX-5 (Fig. 8) which affects the transmit output level. Page 17, lines 17-18. The transmit output step attenuator TX-5 is coupled to the transmit output multiplexer 6 (Fig. 6) which is controlled by the 32 bit addressable latch 1 and, therefore, the digital MCU 100. Page 17, lines 19-21. The digital MCU 100 adjusts the transmit step attenuator RX-5 until a predetermined 1 KHz target reference level is sensed by the digital MCU 100, thereby equalizing the transmit channel sensitivity to the appropriate level. Page 17, lines 21-23.

Claim 51 Language:

51. A self-configuring telephone interface unit, comprising:

a switch matrix, settable to any of a plurality of switch configurations, each switch configuration coupling a plurality of signal lines from a handset port of a telephone to a plurality of signal lines from a headset, the plurality of signal lines from the handset port including a handset port receive path, the plurality of signal lines from the headset including a headset receive path;

Applying Claim 51 to the Disclosure:

A self-configuring telephone interface unit 50 is disclosed in the written description on page 6, line 16, to page 14, line 3 and is illustrated in Figs. 6-9.

The system interface unit 50 allows a telephone accessory 60 or 62 to interface with a telephone base unit 54 or 58. Page 6, line 25 to page 7, line 2. A switch array 2 is shown in Figs. 8-9 of the disclosure. The switch array 2 has four input ports which are coupled to a four line telephone base jack 202. Page 13, lines 13-15. The base jack 202 includes LINES 1-4 in Figs. 7 and 8 from a handset port of a telephone to a plurality of signal lines (labelled RX OUT and TX INPUT in Fig. 8). The switch array 2 is manipulated by sequentially coupling pairs of line input ports until a CO dialtone is sensed by the digital MCU 100 in the receive channel. Page 13, lines 19-27.

Claim 51 (cont.):

a variable gain circuit for modifying an amplitude of a signal transmitted on a headset transmit path switchably coupled to a handset port transmit path; a handset transmit path switchably coupled to the handset port transmit path; and

The transmit output attenuator TX-5 (Fig. 8) functions as a variable gain circuit in the transmit path. Page 12, lines 14-16. The transmit path is coupled to the handset port 202 via switch array 2. See Fig. 8.

Claim 51 (cont.):

a control logic, coupled to the switch matrix, that automatically sets the switch matrix to a preferred switch configuration from among the plurality of switch configurations, the preferred switch configuration coupling the handset port receive path to the headset receive path; and the control logic couples the handset port transmit path alternately to the headset transmit path and to the handset transmit path; receives a first gain signal and a second gain signal from the handset port transmit path; and adjusts the gain of the variable gain circuit in response to the first and second gain signals, the first gain signal generated by an audio test signal transmitted by the handset transmit path, the second gain signal generated by the audio test signal transmitted by the headset transmit path.

Under control of the MCU 100, the switch array 2 is manipulated by sequentially coupling pairs of line input ports until a CO dialtone is sensed by the digital MCU 100 in the receive channel. Page 13, lines 19-27. See also page 4, lines 24-27 where a handset/headset switch is disclosed. Once the receive lines are determined, the transmit lines are determined. Page 15, lines 24-27. The digital MCU 100 manipulates the crosspoint switch array 2 by sequentially coupling pairs of the transmit output ports starting with the most probable pairs defined in system algorithms. Page 17, lines 5-7. A 1 KHz transmit calibration signal is applied to the telephone base unit via the jack lines 202 until the 1 KHz signal is sensed by the digital MCU 100 at the receive level reference output RX LEVEL REF. Page 17, lines 8-11. When the digital MCU 100 senses the 1 KHz signal it will have successfully located the appropriate transmit lines. Page 17, lines 11-13.

Claim 52 Language:

52. The interface unit of claim 51

further comprising:

a handset switch for switchably coupling the handset transmit path to the handset port transmit path;

the plurality of signal lines from the handset port further including the handset port transmit path; and

the control logic further for switchably coupling the handset transmit path to the handset port transmit path by setting the handset switch.

Applying Claim 52 to the Disclosure:

The digital MCU 100 (Fig. 8) manipulates the crosspoint switch array 2 (Fig. 8) by sequentially coupling pairs of the transmit output ports starting with the most probable pairs defined in system algorithms. Page 17, lines 5-7. See also, page 4, lines 24-27 where a handset/headset switch is disclosed.

A transmit signal received from the telephone accessory 60 or 62 (Fig. 6) is coupled to a transmit path which includes a transmit preamplifier TX-2 (Fig. 8), a transmit VCA TX-3 (Fig. 8), a transmit expander circuit TX-4 (Fig. 8), a transmit output step attenuator TX-5 (Fig. 8) and a transmit output amplifier TX-6 (Fig. 8). Page 16, line 4 to page 18, line 4.

The digital MCU 100 (Fig. 8) manipulates the crosspoint switch array 2 (Fig. 8) by coupling pairs of the transmit output ports to the handset port 202 (Fig. 8). Page 17, lines 5-7.

Claim 53 Language:

53. The interface unit of claim 52 wherein:

the handset switch comprises a FET switch; and,

the control logic comprises a FET gate driver for gating the FET switch.

Claim 54 Language:

54. The interface unit of claim 51 wherein:

the plurality of signal lines from the handset port further includes the handset port transmit path;

the plurality of signal lines from the headset further includes the headset transmit path; and

the control logic further switchably couples the headset transmit path to the handset port transmit path by setting the switch matrix.

Applying Claim 53 to the Disclosure:

The switches 0-16 illustrated in Fig. 9 are referred to as "analog switches." Page 18, line 22. It is inherently known that analog switches 0-16 can be implemented as field effect transistors.

The latch 1 adjusts the gate voltages to set the switches 0-16. See Fig. 8.

Applying Claim 54 to the Disclosure:

The handset port 202 includes transmit signal lines. Page 7, lines 9-11.

A transmit channel voice or data input port 204 (Fig. 7) is coupled to an input MIC IN on the analog integrated circuit 200 (Fig. 7). Page 8, lines 25-26.

The digital MCU 100 (Fig. 8) manipulates the crosspoint switch array 2 (Fig. 8) by coupling pairs of the transmit output ports to the handset port 202 (Fig. 8). Page 17, lines 5-7.

Claim 55 Language:

55. The interface unit of claim 51 further comprising:

a signal generator for generating a signal on the headset receive path, the signal indicating that the audio test signal may be transmitted.

Applying Claim 55 to the Disclosure:

A 1 KHz transmit calibration signal is applied to the telephone base unit via the jack lines 202 until the 1 KHz signal is sensed by the digital MCU 100 at the receive level reference output RX LEVEL REF. Page 17, lines 8-11. When the digital MCU 100 senses the 1 KHz signal it will have successfully located the appropriate transmit lines. Page 17, lines 11-13.

Claim 56 Language:

56. A self-configuring headset and telephone interface unit, comprising:
a headset;

Applying Claim 56 to the Disclosure:

A self-configuring telephone interface unit 50 is disclosed in the written description on page 6, line 16, to page 14, line 3 and is illustrated in Figs. 6-9. The telephone accessories 60 or 62 (Fig. 6) can be a headset. Page 14, line 5.

Claim 56 (cont.):

a switch matrix, settable to any of a plurality of switch configurations, each switch configuration coupling a plurality of signal lines from a handset port of a telephone to a plurality of signal lines from a headset, the plurality of signal lines from the handset port including a handset port receive path, the plurality of signal lines from the headset including a headset receive path; and,

The system interface unit 50 allows a telephone accessory 60 or 62 to interface with a telephone base unit 54 or 58. Page 6, line 25 to page 7. A switch array 2 is shown in Figs. 8-9 of the disclosure. The switch array 2 has four input ports which are coupled to a four line telephone base jack 202. Page 13, lines 13-15. The base jack 202 includes LINES 1-4 in Figs. 7 and 8 from a handset port of a telephone to a plurality of signal lines (labelled RX OUT and TX INPUT in Fig. 8). The switch array 2 is manipulated by sequentially coupling pairs of line input ports until a CO dialtone is sensed by the digital MCU 100 in the receive channel. Page 13, lines 19-27. Once the receive lines are determined, the transmit lines are determined; based upon the selected receive lines, certain transmit line configurations are highly probably and are prioritized by algorithms. Page 15, lines 24-27.

Claim 56 (cont.):

a control logic, coupled to the switch matrix, that automatically determines which of the plurality of signal lines from the handset port comprise the handset port receive path, determines a preferred switch configuration from among the plurality of switch configurations based on which of the plurality of signal lines from the handset port comprise the handset port receive path, and sets the switch matrix to the preferred switch configuration, the preferred switch configuration coupling the handset port receive path to the headset receive path.

Under control of the digital MCU 100 (Fig. 7), the addressable latch 1 (Fig. 8) manipulates the switch array 2 by sequentially coupling pairs of line input ports until a CO dialtone is sensed by the digital MCU 100 in the receive channel.

Page 13, lines 19-27.

Claim 57 Language:

57. In a telephone interface unit comprising a switch matrix settable to any of a plurality of switch configurations, a method for automatically configuring the telephone interface unit comprising:

receiving a test signal on a handset port receive path; setting the switch matrix to each of at least two switch configurations; for each of the at least two switch configurations, measuring a signal on the headset receive path resulting from the test signal; and automatically setting the switch matrix to a preferred switch configuration from among the at least two switch configurations, the preferred switch configuration corresponding to the signal on the headset receive path with either a minimum or a maximum value.

Applying Claim 57 to the Disclosure:

The disclosure explains that the "CO Dialtone Method" starts with locating the CO dialtone which indicates the proper receive lines. Page 4, lines 9-10. Under control of the digital MCU 100, the addressable latch 1 manipulates the switch array 2 and the shunt select array be sequentially coupling pairs of line input ports until the CO dialtone is sensed by the digital MCU 100 in the receive channel. Page 13, lines 23-26.

Claim 58 Language:

58. The method of claim 57 wherein:
measuring the signal on the headset
receive path comprises measuring a signal
level of the signal; and the preferred switch
configuration corresponds to the signal on
the headset receive signal path with a
maximum signal level.

Applying Claim 58 to the Disclosure:

The sample and hold circuit RX-8
(Fig. 8) samples the AC dialtone signal and
couples the signal sample to a A/D input
port of the MCU 100 (a receive level
reference port). Page 15, lines 13-23.

Claim 63 Language:

63. In a telephone interface unit comprising a switch matrix settable to any of a plurality of switch configurations for interfacing a handset port of a telephone to a headset, the handset port coupled to the interface unit by a handset port receive path and a handset port transmit path, the headset coupled to the interface unit by headset receive path and a headset transmit path, a method for automatically configuring the interface unit comprising:

receiving a test signal on a handset port receive path; setting the switch matrix to each of at least two switch configurations; for each of the at least two switch configurations, measuring a signal on the headset receive path resulting from the test signal; automatically setting the switch matrix to a preferred switch configuration from the among the at least two switch configurations, the preferred switch configuration corresponding to the signal on the headset receive path with either a minimum or a maximum value; and

Applying Claim 63 to the Disclosure:

The disclosure explains that the "CO Dialtone Method" starts with the locating the CO dialtone which indicates the proper receive lines. Page 4, lines 9-10. Under control of the digital MCU 100, the addressable latch 1 manipulates the switch array 2 and the shunt select array be sequentially coupling pairs of line input ports until the CO dialtone is sensed by the digital MCU 100 in the receive channel. Page 13, lines 23-26.

Claim 63 (cont.):

automatically adjusting a gain of the headset transmit path to match a gain of the handset port transmit path.

The digital MCU 100 adjusts the transmit step attenuator RX-5 until a predetermined 1 KHz target reference level is sensed by the digital MCU 100, thereby equalizing the transmit channel sensitivity to the appropriate level. Page 17, lines 21-23.

Accordingly, each claim copied from U.S. Patent 5,729,603 is supported by the Applicant's disclosure.

Rejection Under 35 U.S.C. § 135(b):

The Examiner rejected claims 41-63 under 35 U.S.C. § 135(b) as not being made prior to one year from the date on which U.S. Patent 5,729,603 ("the '603 patent") issued March 17, 1998, was granted.

The Applicant respectfully traverses the rejection. As stated in the Manual of Patent Examining Procedure:

If the claim presented or identified as corresponding to the proposed count was added to the application by amendment filed more than one year after issuance of the patent, or the application was not filed until more than one year after issuance of the patent (but the patent is not a statutory bar), then under the provisions 35 U.S.C. § 135(b), an interference will not be declared *unless* at least one of the claims which were in the application, or *a parent application*, prior to expiration of the one-year period was for "substantially the same subject matter" as at least one of the claims of the patent.

Manual of Patent Examining Procedure, Section 2307 (emphasis added). The present

application is a continuation of U.S. Patent Application Serial No. 08/625,398, issued on April 6, 1999, as U.S. Patent No. 5,892,823 (the "parent" application). Claim 1 from the parent application was filed on March 27, 1996 (which is the date the parent application was filed) and was amended on April 6, 1998. Accordingly claim 1 of the parent application was pending prior to one year from issuance of the '603 patent.

Note that 35 U.S.C. 135(b) requires that the claim in the application be for the same or "substantially the same subject matter" as the claim in the issued patent. 35 U.S.C. 135(b). Accordingly, the claims need not be identical. Rather, in order for an application claim to be for "substantially the same subject matter" as a patent claim, it must contain all the material limitations of the patent claim. Manual of Patent Examining Procedure, Section 2307, citing, *Parks v. Fine*, 773 F.2d 1577, 227 USPQ 432 (Fed. Cir. 1985), modified, 783 F.2d 1036, 228 USPQ 677 (1986); *Corbett v. Chisholm*, 568 F.2d 759, 196 USPQ 337 (CCPA 1977); *In re Sitz*, 331 F.2d 617, 141 USPQ 505 (CCPA 1964); *Stalego v. Heymes*, 263 F.2d 334, 120 USPQ 473 (CCPA 1959); *Rieser v. Williams*, 255 F.2d 419, 118 USPQ 96 (CCPA 1958); *Emerson v. Beach*, 215 F.2d 290, 103 USPQ 45 (CCPA 1955); *In re Tanke*, 213 F.2d 551, 102 USPQ 93 (CCPA 1954); *Andrews v. Wickenden*, 194 F.2d 729, 93 USPQ 27 (CCPA 1952); *In re Frey*, 182 F.2d 184, 86 USPQ 99 (CCPA 1950); *Thompson v. Hamilton*, 152 F.2d 994, 68 USPQ 161 (CCPA 1946).

Claim 1 the '603 patent is copied below into the left hand column of the chart below, while claim 1 of the parent application, as amended on March 27, 1998⁶, is copied into the right hand column of the chart. To show that the claims are for substantially the same subject matter, corresponding elements of each of the claims are circled and connected by arrows.

Thus, the preamble language, "A self configuring telephone interface unit, comprising:" from claim 1 of the '603 patent corresponds to the language, "A telecommunications interface system that automatically configures" and "the interface comprising:" from claim 1 of the parent application.

Similarly, the limitations, "a switch matrix, settable to any of a plurality of switch configurations," and "a control logic, coupled to the switch matrix, that automatically

determines which of the plurality of signal lines from the handset port comprise the handset port receive path, determines a preferred switch configuration from among a plurality of switch configurations based upon which of the plurality of signal lines from the handset port comprise the handset port receive path, and sets the switch matrix to the preferred switch configuration, the preferred switch configuration coupling the handset port receive path to the headset receive path," from claim 1 of the '603 patent corresponds to the limitation, "a directing circuit coupled between the interface port and the signal processing circuit for electrically coupling the output contacts to the signal inputs wherein the output contacts are automatically selected from the plurality of electrical contacts according to a sensed signal received from the telephone base," from claim 1 of the parent application.

Additionally, the language, "each switch configuration coupling a plurality of signal lines from a handset port of a telephone to a plurality of signal lines from a headset, the plurality of signal lines from the handset port including a handset port receive path," from claim 1 of the '603 patent corresponds to the language, "an accessory having a predetermined number of electrical accessory contacts to appropriately interface with a telephone base unit having a plurality of electrical contacts, including two electrical output contacts, wherein the interface system is configured for coupling the output contacts to a predetermined number of accessory contacts," and the language, "an interface port having the predetermined number of accessory contacts, wherein the port receives an input signal from the output contacts on two of the accessory contacts," from claim 1 of the parent application.

Further, the limitation, "a headset receive path" from claim 1 of the '603 patent corresponds to the limitation, "a signal processing circuit having two signal inputs coupled for receiving the input signal from the interface circuit," from claim 1 of the parent application.

Finally, by reading each claim as a whole and interpreting each in view of its respective specification, it is apparent that they are for "substantially the same subject matter."

Claim 1 of U.S. Patent No. 5,729,603:

1. A self-configuring telephone interface unit, comprising:

a switch matrix, settable to any of a plurality of switch configurations,

each switch configuration coupling a plurality of signal lines from a handset port of a telephone to a plurality of signal lines from a headset, the plurality of signal lines from the handset port including a handset port receive path, the plurality of signal lines from the handset including

a headset receive path; and

a control logic, coupled to the switch matrix, that automatically determines which of the plurality of signal lines from the handset port comprise the handset port receive path, determines a preferred switch configuration from among a plurality of switch configurations based upon which of the plurality of signal lines from the handset port comprise the handset port receive path, and sets the switch matrix to the preferred switch configuration, the preferred switch configuration coupling the handset port receive path to the headset receive path.

Claim 1 of the Parent Application:

1. A telecommunications interface system that automatically configures

an accessory having a predetermined number of electrical accessory contacts to appropriately interface with a telephone base unit having a plurality of electrical contacts, including two electrical output contacts, wherein the interface system is configured for coupling the output contacts to a predetermined number of accessory contacts,

the interface comprising:

a. an interface port having the predetermined number of accessory contacts, wherein the port receives an input signal from the output contacts on two of the accessory contacts;

b. a signal processing circuit having two signal inputs coupled for receiving the input signal from the interface circuit; and

c. a directing circuit coupled between the interface port and the signal processing circuit for electrically coupling the output contacts to the signal inputs wherein the output contacts are automatically selected from the plurality of electrical contacts according to a sensed signal received from the telephone base.

In sum, while claim 1 of the parent application is not identical to claim 1 of U.S. Patent 5,729,603, each material element of claim 1 of the parent application corresponds uniquely to a material element of claim 1 of U.S. Patent No. 5,729,603. Accordingly, claim 1 of the parent application is for "substantially the same subject matter" as claim 1 of U.S. Patent 5,729,603, as required by 35 U.S.C. § 135.

Rejection Under 35 U.S.C. § 102(e):

The Examiner rejected claim 1 under 35 U.S.C. § 102(e) as being anticipated by Frick et al. (U.S. Patent 5,473,676).

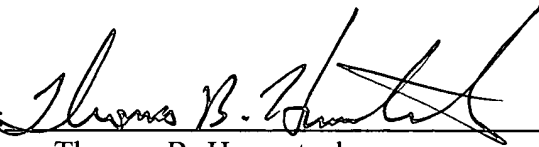
The Applicant has cancelled claim 1. Accordingly, the rejection is now moot.

In view of the above, the Applicant submits that all requirements for declaring an interference have been met. Accordingly, the Applicant respectfully requests that an interference be declared. Should outstanding issues remain, the Examiner is encouraged to telephone the undersigned at (650) 833-0160 to discuss the same so that any such outstanding issues can be expeditiously resolved.

Respectfully submitted,

HAVERSTOCK & OWENS LLP

Dated: August 20, 1999

By: 

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